MALAYSIA NATURAL FIBRES FOR DIVERSED BIO-BASED APPLICATION

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Potential of Kenaf in Economic Perspectives

Nur Aimi Mohd Nasir, Mohd Adlan Mustafa Kamalbhrin, Hazleen Anuar

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Summary: This chapter investigates the economic's potential of kenaf all over the world notably in United States, China, Bangladesh, India, Myanmar and Indonesia Research and development on the potential of kenaf as it is a consistent source of alternative fibres and potential alternative crop to tobacco has already been done in Malaysia in early 2000 Its application does not limit to its fibres but also its cores part This chapter also briefly review on kenaf's novelty and production-specifically in economic perspectives

Introduction

Kenaf is a short day and annual herbaceous plant. It is the second most important natural fibres besides jute and other allied fibres next to cotton It is a member of family Malvaceae and found to be the third largest fibre crop of economic importance after cotton and jute (Adegbite et al , 2005) Due to global environmental issues and inadequate raw fibre resources, scientists worldwide have realised and begun to explore the full potential of kenaf and its diverse uses (Keshk et al , 2006)

Historically, kenaf is believed to have originated from Africa since it is grown as food crop in several African nations According to Adegbite et al (2005), it is most likely originated from Sudan and commonly cultivated for both food and fibre in West Africa Furthermore, India has produced and used kenaf for the last 200 years, while Russia started producing kenaf in 1902 and introduced the crop to China in 1935 (Dempsey, 1975, Weeber and Bledsoe 2002) United States begun to show their interest on kenaf in 1941's after World War II as the imported of jute was shut off (Rymsa, 1999) Starting from that time, research and production of kenaf has begun due to its potential to substitute jute The United States Department of Agriculture (USDA) had determined kenaf as a promising "new" crop as early as 1950's by the President Dwight David Eisenhower Lots of research and development were conducted in 1990's demonstrated the suitability of kenaf for use in building materials, adsorbents, textiles, livestock feed, and fibres in new and recycled plastics (Bledsoe and Webber ,2001, Webber and Bledsoe, 2002)

World Production of Kenaf

Natural renewable materials such as kenaf are gradually attracting more and more attentions